



File No QA-11022/1/2024-QA-FSSAI  
फ़ाइल संख्या QA-11022/1/2024-QA-FSSAI  
Food Safety and Standards Authority of India  
भारतीय खाद्य सुरक्षा एवं मानक प्राधिकरण  
(A Statutory Authority established under the Food Safety & Standards Act, 2006)  
(खाद्य सुरक्षा एवं मानक अधिनियम, 2006 के तहत स्थापित एक वैधानिक प्राधिकरण)  
(Quality Assurance Division)/ (गुणवत्ता आश्वासन प्रभाग)  
FDA Bhawan, Kotla Road, New Delhi – 110002  
एफडीए भवन, कोटला रोड, नई दिल्ली - 110002

Dated: 20<sup>th</sup> January 2025

### Examination Plan, Schedule and Tentative Syllabus of 10<sup>th</sup> FAE Practical Examination 2024

- All the candidates who have qualified CBT of 10<sup>th</sup> FAE are eligible for appearing in the Practical examination is scheduled to be held in March and April 2025 in different batches.
- The information regarding the pattern, qualifying criteria, schedule and syllabus of the examination are as below:

#### Pattern of Practical Examination

	Particular	Weightage	(%) Marks
Part-A	Methods of Analysis	25	50
Part-B	Practical Proficiency	50	100
Part-C	Viva-voce	25	50
	<b>Total</b>	100	200

- The Practical Examination will have three parts viz., Part-A (Dealing with the methods of analysis), Part-B (Practical test to be conducted by the candidates) and Part C (Viva- voce).

#### Qualifying Criteria

Candidates who will score a minimum of 40% separately in each of the part A, B& C; and a minimum aggregate of 50% shall only be declared as passing the Practical Examination and eventually be declared as 'Food Analyst' by FAE Board subject to fulfilling all the laid down conditions.

**Tentative Schedule Date**

Batch I – 8<sup>th</sup> & 9<sup>th</sup> March 2025 (2days)

Batch II – 22<sup>nd</sup> -23<sup>rd</sup> March 2025 (2days)

Batch III – 5<sup>th</sup> -6<sup>th</sup> April 2025 (2days)

Time: 09:00 AM to 05:00 PM

**Tentative Syllabus for Practical Exam with Viva-Voce:**

- 1) Physical, Chemical, Microbiological (including microscopic examination as required) examination of the food and food products as described under FSS Regulation, 2011.
- 2) Proximate analysis of food.
- 3) Detection and estimation of various contaminants in foods.
- 4) Any other type of food analysis as required under FSS Act, 2006 and FSS Regulation, 2011.
- 5) Quantifications of Melamine Analysis, Herbicides, Pesticides and Synthetic Color.
- 6) Antibiotic, Antibacterial drug residues in Food.
- 7) Specialized Veterinary Samples received from Ante-mortem and Post-mortem inspection
- 8) Gel Electrophoresis, ELISA, PCR, RT-PCR, r-PCR, Antibiotic and Hormone residues, Melamine, GM food analysis method.
- 9) Fatty acid profile, PUFA, MUFA, Cholesterol.

**Indicative list of Analysis:**

- 1) Analysis of Artificial sweeteners e.g. Aspartame in diet drinks and light foodstuffs.
- 2) Aflatoxins and Mycotoxins contamination in Food.
- 3) Quantification of preservatives like SO<sub>2</sub>, Benzoic acid, Synthetic colors in foods.
- 4) Melamine in milk and milk products.
- 5) Principles and detailed method of Pesticides Analysis (Organochlorine and Nitrogen, Sulphur containing compounds Sub ppb level) in Food stuffs including Fruits and Vegetables.
- 6) Samples received (Referral/Appellate samples) from Designated Officer under FSS Act/Rules/Regulations.

**Indicative list of instruments provided by the practical centers:**

- 1) HPLC High Performance with UV-Vis Detector.
- 2) HPLC with UV-vis and Fluorescence Detector- Amino Acid for system and for

- 3) Protein Analyzer
- 4) HPLC with Evaporating Light Scattering Detector (ELSD) Detector- For Sugar Analysis
- 5) LC-QQQ MS/MS (Triple Quadrupole Detector) (1 for Pesticide, 1 for Aflatoxins and 1 for Antibiotics)
- 6) LC-QToF- Quadrupole Time of Flight) (for Non -Target Pesticide Analysis).
- 7) Ion Chromatograph
- 8) PCR & RTPCR - Real Time Polymerase Reaction system -for GM food and
- 9) Pathogen Detection
- 10) GCMS - QQQ (MS/MS) Gas Chromatograph Triple Quad system- Pesticide Analyzer
- 11) GCMS - QQQ (MS/MS) Gas Triple Quad System - for Dioxins, PAH and PCB'analysis
- 12) GC- QToF system for Non Target Compounds Analysis
- 13) GCMS Sing le Quad with ECD and FPO Detector
- 14) GC with FID, ECD, NPD Detector
- 15) DNA Sequencer
- 16) Bioanalyzer- DNA/RNA/Protein Analysis
- 17) Colony Counter
- 18) Fourier Transform Infrared spectroscopy (FTIR)
- 19) Graphite Furnace Atomic Absorption Spectrometry (GFAAS)
- 20) LC-ICP-MS (liquid Chromatography-Inductively Coupled Plasma –Mass Spectrometry)
- 21) UV-Vis Spectrophotometer
- 22) Kjeldahl Digester system
- 23) Gel Electrophoresis system
- 24) Flow Cytometer
- 25) Imaging System- Microscope
- 26) Nuclear Magnetic Resonance (NMR) system
- 27) Microbiological ELISA
- 28) Micro Wave Digesters
- 29) Rotary Evaporator
- 30) Analytical Balances
- 31) pH meter
- 32) Hot Plate
- 33) Centrifuges
- 34) Oven
- 35) Refrigerator
- 36) Deep Freezer
- 37) Water Bath